

WEST Search History

DATE: Thursday, June 05, 2003

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>			
L33	l30 and l32	234	L33
L32	oxygen or o?.sub\$	664298	L32
L31	l29 and l30	4	L31
L30	l4 or l9	593	L30
L29	l15 and l13 and l28	387	L29
L28	((427?\$)!.CCLS.)	127762	L28
L27	l25 and l26	2	L27
L26	l8 or l4	30589	L26
L25	l23 and l24	109	L25
L24	((438/\$)!.CCLS.)	138687	L24
L23	l15 and l13	3071	L23
L22	l21 and l13	6	L22
L21	l16 or l20	107	L21
L20	l4 and l15	49	L20
L19	l4 and l115	0	L19
L18	l9 and l15	74	L18
L17	l9 and l4	90	L17
L16	l9 and l15	74	L16
L15	sic or sigec	60819	L15
L14	l12 and l13	9	L14
L13	carbon-carbon or c-c or unsaturat\$4	325411	L13
L12	l9 and l11	88	L12
L11	double or triple	926814	L11
L10	l3 and l9	1	L10
L9	l7 same l8	498	L9
L8	ultra adj high	30518	L8
L7	chemical adj vapor	86255	L7
L6	ultra adj high	20	L6
L5	l3 and l4	1	L5
L4	uhv-cvd	185	L4
L3	unsaturat\$4 adj3 double	8911	L3
L2	usaturat4 adj4 double	0	L2

10-10-19-28

L10 ANSWER 1 OF 1 CA COPYRIGHT 2003 ACS
AN 123:270226 CA
TI Compositional and structural properties of hydrogenated amorphous silicon-carbon films prepared by **ultra-high-vacuum** plasma-enhanced **chemical vapor** deposition with different carbon sources
AU Demichelis, F.; Giorgis, F.; Pirri, C. F.; Tresso, E.
CS Dipartimento di Fisica, Politecnico di Torino, Turin, 10129, Italy
SO Philosophical Magazine A: Physics of Condensed Matter: Structure, Defects and Mechanical Properties (1995), 72(4), 913-29
CODEN: PMAADG; ISSN: 0141-8610
PB Taylor & Francis
DT Journal
LA English
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
AB Hydrogenated amorphous Si-C films were deposited by **ultra-high-vacuum** plasma-enhanced **CVD** in SiH₄ + CH₄ and SiH₄ + C₂H₂ gas mixts. Both types of film were compared with respect to their compositional, optical and structural properties. They have an optical gap of 2.3-3.3 eV for [C]/[C + Si] of 0.2-0.7 and possess high uniformity. The deposition rate of C₂H₂-based films is 4-5 .ANG. s⁻¹, 1 order of magnitude higher than CH₄-based films having large bandgap. By IR spectroscopy, marked differences in C and H incorporation were found for the films grown using the 2 different C sources. Anal. of the IR spectra reveals, among the most important structural characteristics, that the films grown from the SiH₄ + CH₄ plasma have a higher concn. of Si-C bonds than those grown from SiH₄ + C₂H₂, and that C₂H₂-based alloys gave C clusters during the growth of the films. Considerations of the av. coordination no., the chem. bonding and the degree of chem. order are also reported and discussed.
ST optical hydrogenated silicon carbon film CVD
IT Infrared spectra
(of hydrogenated amorphous silicon-carbon films prepd. by **ultra-high-vacuum** plasma-enhanced **CVD** with different carbon sources)
IT Energy level, band structure
(gap, of hydrogenated amorphous silicon-carbon films prepd. by **ultra-high-vacuum** plasma-enhanced **CVD** with different carbon sources)
IT Vapor deposition processes
(plasma, compn. and structural properties of hydrogenated amorphous silicon-carbon films prepd. with different carbon sources by **ultra-high-vacuum**)
IT 1333-74-0, Hydrogen, uses
RL: MOA (Modifier or additive use); USES (Uses)
(compn. and structural properties of amorphous silicon-carbon films prepd. by **ultra-high-vacuum** plasma-enhanced **CVD** with different carbon sources and contg.)
IT 107992-37-0, **Silicon carbide** (SiO-1C0-1)
RL: PRP (Properties)
(compn. and structural properties of hydrogenated amorphous films prepd. by **ultra-high-vacuum** plasma-enhanced **CVD** with different carbon sources of)
IT 7803-62-5, Silane, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(compn. and structural properties of hydrogenated amorphous silicon-carbon films prepd. by **ultra-high-vacuum** plasma-enhanced **CVD** with different carbon sources and)
IT 74-82-8, Methane, reactions 74-86-2, **Acetylene**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)

(compn. and structural properties of hydrogenated amorphous
silicon-carbon films prepd. by ultra-high-vacuum
plasma-enhanced CVD with silane and)

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